

1-24 (Cancelled)

25. (Currently Amended) A method for producing a compressed earth block ~~of a soil~~, the method comprising:

(a) providing a compression chamber with an elongated bore having an open outlet end ~~and having a longitudinal axis~~;

(b) introducing into the bore of the compression chamber an amount of uncompressed ~~soil~~earth; then

(c) forcing the uncompressed ~~soil~~earth toward the outlet end, which is blocked by previously compressed lifts of earth, and compressing against which the uncompressed ~~soil~~earth ~~is into a compressed soil into a new lift~~ within the compression chamber; and

(d) ~~causing a length of the compressed soil to extend out the outlet end of the compression chamber and protruding a selected increment of the compressed soil out from the outlet end of the compression chamber~~ repeating steps (b) and (c) to provide a plurality of lifts compressed together within the compression chamber into a continuous length of compressed earth that protrudes out the open outlet end; and

(e) separating a portion from the continuous length to define a compressed block.

26. (Currently Amended) The method of claim 25, wherein step (ee) comprises pushing the portion of the length of compressed soil~~earth~~ out the outlet end into and through a shearing chamber onto a support structure; ~~and wherein step (d) comprises then moving the shearing chamber relative~~transverse to the bore of the compression chamber ~~in a direction perpendicular to the longitudinal axis to shear said portion from the continuous length.~~

27. (Currently Amended) The method of claim 25, wherein step (b) comprises gravitationally feeding the uncompressed soil~~earth~~ into the compression chamber ~~in from~~ a direction perpendicular~~transverse~~ to the ~~longitudinal axis~~bore.

28. (Currently Amended) The method of claim 25, wherein step (c) comprises applying pressure from an actuator to a ramming plate in an amount greater than an opposing frictional threshold force of the soil exerted by the previously compressed lifts.

29. (Cancelled)

30. (Currently Amended) The method of claim 25, wherein step (d) further comprises varying the ~~lengths~~ length of said portion of the continuous length and weights of the increments of soil compressed earth protruding from the compression chamber.

31. (Currently Amended) The method of claim 25, wherein ~~the increments~~ said portion of the continuous length of soil compressed earth protruding from the compression chamber in step (d) is made up of a plurality of lifts and has a length greater than 6 inches.

32. (Currently Amended) The method of claim 25, wherein ~~the increments~~ said portion of the continuous length of soil compressed earth protruding from the compression chamber in step (d) is made up of a plurality of lifts and has a weight greater than 100 pounds.

33. (Currently Amended) A method for producing a compressed block of earth, the method comprising:

(a) providing a compression chamber with an elongated bore having an open outlet end and having a longitudinal axis;

(b) introducing into the bore of the compression chamber an amount of uncompressed soil earth by gravitationally feeding the uncompressed soil earth into the bore of the compression chamber in a direction perpendicular to the longitudinal axis from a port in a forward portion of the compression chamber; then

(c) applying pressure from an actuator to stroking a ramming plate into the bore of the compression chamber progressing from the forward portion of the chamber towards the open outlet end, to apply a force in an amount to the uncompressed earth greater than an opposing frictional threshold force of all lifts of previously compressed earth the soil in the bore; then

(d) moving the ram in a rearward direction and repeating steps (b) and (c) to force a continuous length of the uncompressed compressed soil earth made up of a plurality of the lifts toward and out the outlet end, and compressing the uncompressed soil into a compressed soil within the compression chamber; and

(e) ~~causing a length of the compressed soil to extend out the outlet end of the compression chamber and protruding a selected increment of the compressed soil out from the outlet end of the compression chamber; and~~

(e) at a selected point, shearing at least part of the continuous length protruding from the outlet end from the remaining portion of the continuous length to define a compressed block

34. (Currently Amended) The method of claim 33 further comprising forming mating indentations and protrusions on ~~at least some of the blocks; side surfaces of the continuous length of compressed earth as it is being formed and passes through the outlet end, so that upon shearing, an indentation on one of the compressed blocks will mate with a protrusion of another block to form interlocking surfaces and aligning the indentation of one of the compressed blocks with a protrusion of another of the compressed blocks.~~

35. (New) The method of claim 33, wherein the compressed block is made up of a plurality of the lifts.

36. (New) The method of claim 33, further comprising:

placing a shearing chamber at the outlet end of the compression chamber; wherein
step (d) comprises incrementally moving the continuous length directly from the outlet end into the shearing chamber with each of the strokes in step (c); and
step (e) comprises moving the shearing chamber transverse to the longitudinal axis.

37. (New) The method of claim 33, further comprising:

providing the ram with a convex protrusion, and engaging the uncompressed earth with the protrusion.

38. (New) The method of claim 33, wherein step (e) further comprises:

after shearing the compressed block from the continuous length, causing the ram to push the compressed block forward onto a supporting surface with the next stroke in step (c).

39. (New) The method of claim 33, wherein step (d) further comprises moving the ram rearward until the ram is longitudinally rearward of the port in the compression chamber.

40. (New) The method of claim 33, wherein the length of the forward stroke in step (c) is substantially shorter than a longitudinal length of the compression chamber.

41. (New) The method of claim 33, wherein as the ram moves forward in step (c), it closes off the port.

42. (New) A method for producing a compressed block of earth, the method comprising:

- (a) providing a compression chamber with a longitudinal bore that ends with an open outlet end, a fill port communicating with the bore, and a ram that is movable within the bore from a retracted position on one side of the fill port to an extended position between the fill port and the outlet end;

- (b) positioning a shearing chamber and a support structure at the outlet end of compression chamber;

- (b) while the ram is in the retracted position, feeding a batch of uncompressed earth into the bore from the fill port; then

- (c) while the outlet end is open, stroking the ram forward to force the uncompressed earth contained in the compression chamber against previously compressed lifts of earth in the compression chamber, and when the force exerted by the ram overcomes the frictional threshold of the combined mass of the previously compressed lifts, advancing the combined mass a pre-selected distance; then

- (d) moving the ram to the retracted position and repeating steps (b) and (c), thereby fusing each newly compressed lift with all previously compressed lifts to form a continuous length of compressed earth, which progressively exits the outlet end into the shearing chamber with each newly formed lift;

(e) when a desired length of the compressed earth has moved through the shearing chamber onto the support structure, actuating the shearing chamber to sever a compressed block of desired length, which is fully supported on the support structure.

43. (New) The method of claim 42 further comprising forming mating indentations and protrusions on side surfaces of the continuous length of compressed earth as it is being formed and passes through the compression chamber, the indentations and protrusions being configured so upon shearing, an indentation of one of the compressed blocks will mate with a protrusion of another of the compressed blocks to form interlocking surfaces.

44. (New) The method of claim 42, wherein the shearing chamber of step (b) has open forward and rearward ends, and wherein step (e) comprises:

moving the shearing chamber transverse to the longitudinal bore of the compression chamber.